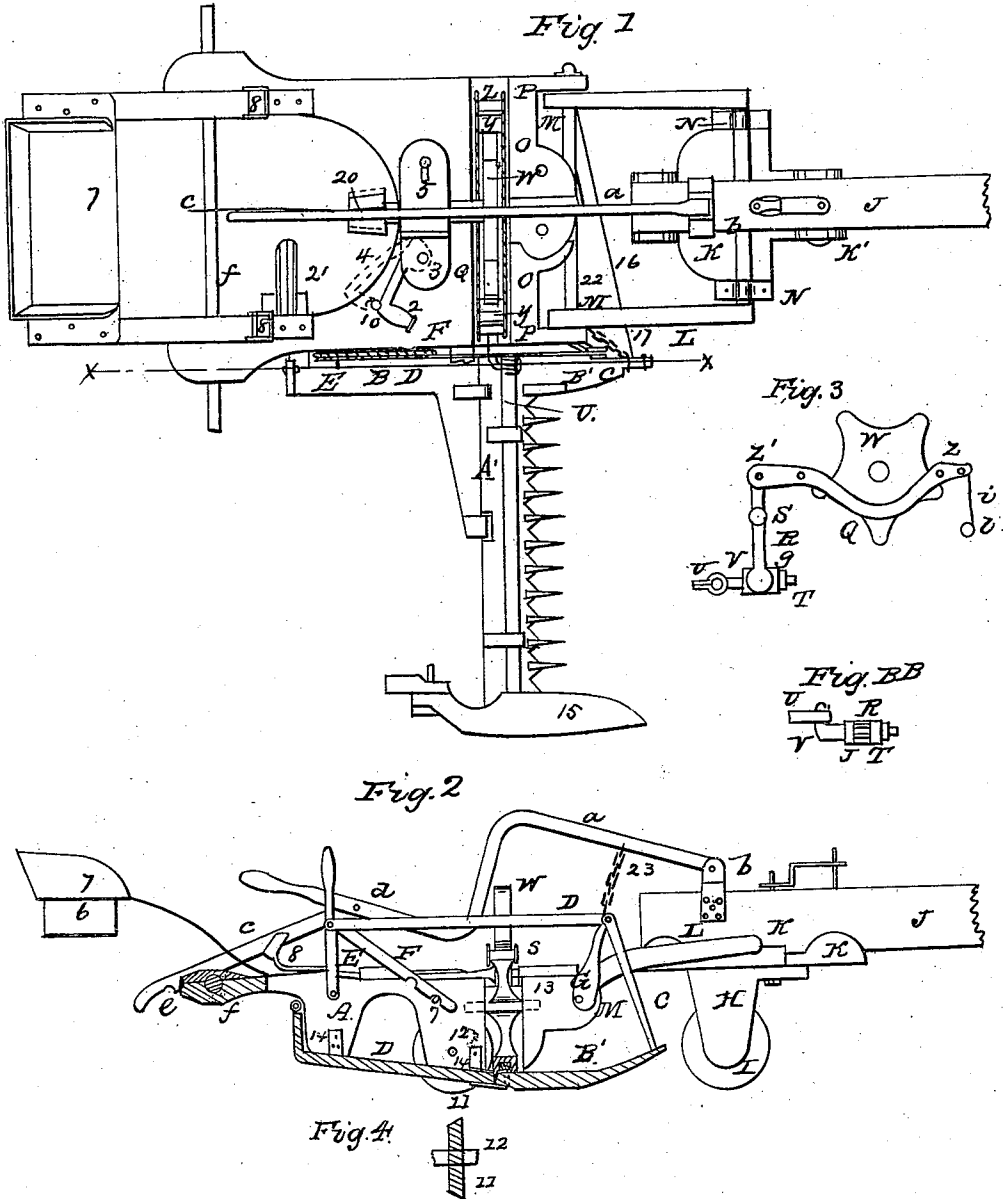


C. CADWELL.

Harvester.

No. 77,714.

Patented May 12, 1868.



witnesses.
J. S. Chapin
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United States Patent Office.

CALEB CADWELL, OF WAUKEGAN, ILLINOIS.

Letters Patent No. 77,714, dated May 12, 1868.

IMPROVEMENT IN HARVESTERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CALEB CADWELL, of Waukegan, in the county of Lake, and in the State of Illinois, have invented an Improved Harvester; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a plan view of my invention.

Figure 2, a sectional elevation of the same, taken through the line X X, fig. 1.

Figure 3, a transverse sectional elevation of the motion-wheel, showing the motion-lever, side-piece, and strap, also the double joint, arranged to operate in combination with the motion-lever and pitman.

The nature of my invention consists—

First, in the use of a double lever attached to the tongue of the harvester, and arranged with one or more notches, fitted to rest on the main shaft of the drive-wheels, for the purpose of regulating the position of the cutter-bar when in use, or moving from place to place.

Second, in arranging a cam-wheel to work in an oscillating-frame, and to operate in combination with a jointed lever, for giving motion to the cutter-bar.

Third, in the construction and arrangement of double joint for connecting the motion-lever to the pitman, in order that the latter may work easily, and not become entangled with grass and weeds.

Fourth, in the peculiar arrangement of levers, chains, and a catch, for regulating the inclination of the cutter-bar, and holding it in position for use.

In order to give a correct understanding of my invention, I have marked corresponding parts with similar letters, and will now give a detailed description.

It will be seen from the drawings that the harvester is represented as complete, except the travelling-wheels and the main drive-wheel, these parts being so well understood as to need no description.

A strong iron frame, A, is made to support the various parts of the harvester, and with a slot through it, for the purpose of placing an oscillating-frame, Q Q, figs. 1 and 3, in a convenient position for supporting a cam-wheel, W, which gives motion to the cutter-bar U, fig. 1. And to accomplish this purpose, one end of the frame Q Q is hung to a strap, i, fig. 3, by means of a joint, Z, the lower end of the strap being also arranged with a joint, l, and secured by a pin fitted in the frame A. The motion-lever R is hung to the frame A, as seen at 13, fig. 2, and is jointed to the frame Q Q at Z', and is also attached to the pitman V by a double joint, T.

This joint is formed by making an open mortise in the lower end of the motion-lever for the pitman-shank to pass through, and rounded at the sides of the mortise to fit the boxes g g, through which the pitman also passes, and is made to hold the joint together, by means of a nut and pin.

A bottom view of the double joint is clearly shown at figure B B.

The cam-wheel W is fixed on a shaft, having bearings at both sides of the frame Q Q, and receives its motion by means of a common drive-wheel, not shown, and a pinion, 20, which may be thrown in and out of gear by a cam-lever, 2, as seen by the dotted lines 4, fig. 1.

The arrangement for regulating the pitch of the cutter-bar is as follows: A rod, C, is jointed to the shoe, B', and to a rod, D, and brace, G, the latter being jointed to frame A.

A lever, E, is jointed to rod D, frame A, and a notched catch, F, arranged to hold on to a pin, q, fig. 2, fixed to frame A.

This construction is simple, but convenient for raising the cutter-bar U, as the lever E is placed within reach of the driver's seat, and can be readily drawn back and forth.

An angle-brace, B, is hinged to frame A and finger-bar A', and has a lever, 21, jointed to it, and to the under side of frame A, and placed in a suitable position for the driver to raise it up and down when the outer end of the cutter-bar is to be elevated, for passing over obstacles, &c.

A chain, 17, is attached to the nose of shoe B', and to the rod 22, to prevent the finger-bar A' from

doubling under, and a chain, 16, is secured to said shoe at the opposite end of the rod, for keeping the finger-bar at right angles with the tongue J.

A bail, L, is jointed to frame A at M M, by means of a rod, 22, passing through said bail, and projections P P, and is made to pass through the tongue J, and is supported by bearings N N, made in a plate, K, figs. 1 and 2, fastened to the tongue, and made to project outward for that purpose, and the support of a caster-wheel, I.

A lever, a, is hinged to the tongue J, and has a chain, 23, attached to it and to the rod 22, and a catch, c, jointed to it, with one or more notches, e, for locking over the main shaft, f, of the travelling-wheels, as seen at fig. 2.

The end of this lever is within reach of the driver's seat, and can be used to raise the front of the harvester when passing to and from a field, when desired.

The inner travelling-roller, 11, is hung to the inside of frame A by a bolt, 12, and is used to prevent the harvester from dragging on the ground; and to prevent the roller from clogging, I bevel its periphery, as seen at fig. 4.

A seat, 7, having a tool-box, 6, is placed at the rear of the harvester, and on springs, at the front ends of which are foot-pieces, 8, for the convenience of the driver.

Having thus fully described my device, what I claim, and desire to secure by Letters Patent, is—

1. The double joint T, in combination with the motion-lever R and pitman V, arranged to operate substantially as specified.
2. The combination of the oscillating-frame Q Q, cam-wheel W, strap i, motion-lever R, double joint T, and pitman V, all arranged as and for the purpose herein specified.
3. The lever a, attached to the tongue J, in combination with catch c, chain 23, and rod 22, arranged to raise the front of the harvester, as described.
4. The arrangement of the rods C D, brace G, lever E, catch F, and shoe B', for raising the cutter-bar U, substantially as described.

CALEB CADWELL.

Witnesses:

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